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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,918	10/27/2000	Patrick M. Lavelle	8002A-29	8367

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EXAMINER
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ANYASO, UCHENDU O

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 01/28/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/698,918

Applicant(s)

LAVELLE ET AL.

Examiner

Uchendu O Anyaso

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 15-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. **Claims 1-10 and 15-27** are pending in this action.

***Claim Rejections - 35 USC ' 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-9, 15-18 and 25-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Adams et al* (U.S. Patent 6,380,978) in view of *Murphy* (U.S. Patent 5,610,822), and further in view of *Boyden et al* (U.S. Patent 6,301,637).

Regarding **independent claims 1, 25 and 26**, and for **claims 2-6, 15-17 and 27** Adams teaches an invention relating to processing of video images using a portable video display device wherein applications include use in an automobile (*see* column 5, lines 36-46, 56-60, figure 2A).

Furthermore, Adams teaches a display device wherein viewing by a passenger at the rear seat of an automobile would be accomplished (*see* figure 2A).

Also, Adams teaches how the portable DVD player also includes a digital processing system including a decoder, an image enhancement engine, and a display controller wherein the decoder (28) receives signals from a DVD inserted into the enclosure to provide a decoded, interlaced video signal (column 3, lines 4-12, figure 3).

Furthermore, Adams teaches an audio and infrared link (32) and how an IR transmitter for wireless headphones may be provided, as may stereo speakers with small stereo power amp

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for presentations or playback without headphones (column 7, lines 24-27, figure 3; *see also* column 7, lines 4-24).

Furthermore, Adams teaches two input sources by teaching video data input and audio data input (*see* figure 4 at video data and audio data). However, Adams does not teach the concept of at least two input sources wherein one input source provides signals to one headphone and a second input source providing signals to a second headphone. On the other hand, Murphy teaches this concept by providing different input sources to different users via multiple headphones such that multiple audio output units such as headphones (40a-40n) accommodate a plurality of users simultaneously (column 3, lines 26-34, figure 2 at 36, 40a-40n).

Thus, it would have been obvious to a person of ordinary skill in the art to combine Adams and Murphy because while the combination of Adams and Murphy teaches providing wireless signals to headphones by the method of providing an audio and infrared link (32) and an IR transmitter for wireless headphones (column 7, lines 24-27, figure 3; *see also* column 7, lines 4-24), Murphy teaches the concept of providing different input sources to different users via multiple headphones wherein Murphy's invention provides for having multiple audio output units such as, for example, headphones (40a-40n) to accommodate a plurality of users simultaneously (column 3, lines 26-34, figure 2 at 36, 40a-40n). The motivation for combining these inventions would have been to provide multiple audio and video outputs via headphones (40a-40n) to a plurality of users simultaneously (column 3, lines 26-34, figure 2 at 36, 40a-40n).

Furthermore, Adams and Murphy do not teach the display the headphones with left and right audio channels. On the other hand, Boyden teaches how to achieve an audio system that

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has left and right audio channels with different frequency signals in the audio system (*see* column 9, lines 25-35, figure 13 & 14 at 120; *see also* column 9, lines 59-61, figure 15 at 170; *see generally* figure 18 at 210, 212).

Thus, it would be obvious to a person of ordinary skill in the art to combine Adams, Murphy and Boyden because while the combination of Adams and Murphy teach an invention relating to processing of video images using a portable video display device wherein applications include use in an automobile (*see* column 5, lines 36-46, 56-60, figure 2A), Boyden teaches how to achieve an audio system that has left and right audio channels with different frequency signals in the audio system. The motivation for combining these inventions would have been to achieve maximum comfort and stability to the ears of a listener (*see* column 10, lines 55-65).

Regarding **claims 7 and 8**, in further discussion of claim 1, Adams teaches a liquid crystal display (36) (figure 3 at 36).

Regarding **claims 9**, in further discussion of claim 1, Adams, Murphy, and Boyden do not teach a display device employing a touch screen technology.

However, it would have been obvious to a person of ordinary skill in the art to replace the video display or liquid crystal display with a touch screen display. The motivation for doing so would have been to provide a user with display device that also offers a means to input data.

Regarding **claim 18**, in further discussion of claim 1, Boyden teaches a wireless headphone with an antenna (figure 26 at 308).

4. **Claims 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Adams et al* (U.S. Patent 6,380,978) in view of *Murphy* (U.S. Patent 5,610,822), and further in view of *Boyden et al* (U.S. Patent 6,301,637), as in claim 1 above, and further in view of *Burke et al* (U.S. Patent 6,134,223).

Regarding **claim 10**, in further discussion of claim 1, Adams, Murphy, and Boyden do not teach the display device including a picture-in-picture and split screen capability. On the other hand, Burke teaches how a picture-in-picture or split screen function may be provided in a video conferencing system (column 11, lines 49-67; *see also* column 23, lines 35-45, figure 16).

Thus, it would have been obvious to a person of ordinary skill in the art to combine Adams, Murphy, Boyden and Burke because while the combination of Adams, Murphy, and Boyden teach an invention relating to processing of video images using a portable video display device wherein applications include use in an automobile (*see* column 5, lines 36-46, 56-60, figure 2A), Burke teaches how a picture-in-picture or split screen function may be provided in a video conferencing system (column 11, lines 49-67; *see also* column 23, lines 35-45, figure 16). The motivation for combining these invention would have been to create a combined multiple image on the display screen at the same time (*see* column 23, lines 35-45).

5. **Claims 20-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Adams et al* (U.S. Patent 6,380,978) in view of *Murphy* (U.S. Patent 5,610,822), and further in view of *Boyden et al* (U.S. Patent 6,301,637), as in claim 1 above, and further in view of *Hylton et al* (U.S. Patent 5,793,413).

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Regarding claims **20-24**, in further discussion of claim 1, Adams, Murphy, and Boyden do not teach CDMA technology. On the other hand, Hylton teaches a wireless video distribution scheme that employs CDMA technology (*see* Abstract).

Thus, it would have been obvious to a person of ordinary skill in the art to combine Adams, Murphy and Hylton because while Adams and Murphy teach an invention relating to processing of video images using a portable video display device wherein applications include use in an automobile (*see* column 5, lines 36-46, 56-60, figure 2A), Hylton teaches a wireless video distribution scheme that employs CDMA technology (*see* Abstract). The motivation for combining these inventions would have been to utilize an efficient wireless distribution scheme (*see* Abstract).

### ***Response to Arguments***

6. Applicant's amendments and arguments filed on November 3, 2003 have been fully considered but they are not persuasive.

Applicant amended independent claims 1, 25 and 26 to include the features of presently canceled claim 14 i.e., the feature of a wireless headphone set possessing a left audio channel and a right audio channel, each of the channels having a different frequency for each wireless headphone set. Applicant then contends that Adams, Murphy, and Boyden references do not teach this feature.

Examiner disagrees with applicant's assertions for the following reasons: First, in the previous Office Action dated July 30, 2003, it was stipulated in canceled claim 14 that Adams and Murphy do not teach left and right audio channels. This precipitated the use of the Boyden

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reference to achieve the combination of Adams in view of Murphy, and further in view of Boyden. Applicant's present amendment highlights the features of canceled claim 14. As a result, Boyden is used because Boyden teaches how to achieve an audio system that has left and right audio channels with different frequency signals in the audio system (see column 9, lines 25-35, figure 13 & 14 at 120; see also column 9, lines 59-61, figure 15 at 170; see generally figure 18 at 210, 212).

Thus, it would be obvious to a person of ordinary skill in the art to combine Adams, Murphy and Boyden because while the combination of Adams and Murphy teach an invention relating to processing of video images using a portable video display device wherein applications include use in an automobile (see column 5, lines 36-46, 56-60, figure 2A), Boyden teaches how to achieve an audio system that has left and right audio channels with different frequency signals in the audio system. The motivation for combining these inventions would have been to achieve maximum comfort and stability to the ears of a listener (see column 10, lines 55-65).

Second, applicant further contends that Adams, Murphy, Burke and Hylton fail to teach the use of different frequencies for each left and right channel of the wireless headphone set. Applicant may have misunderstood the essence of these references. Boyden is primarily used to teach this feature i.e., the feature of how to achieve an audio system that has left and right audio channels with different frequency signals in the audio system. On the other hand, the essence of Adams, Murphy, Burke and Hylton are the following: Adams teaches two input sources by teaching video data input and audio data input (see figure 4 at video data and audio data); Murphy teaches the concept of at least two input sources wherein one input source provides signals to one headphone and a second input source providing signals to a second headphone by

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providing different input sources to different users via multiple headphones such that multiple audio output units such as headphones (40a-40n) accommodate a plurality of users simultaneously (column 3, lines 26-34, figure 2 at 36, 40a-40n). Furthermore, the essence of Burke lies in its teachings of how a picture-in-picture or split screen function may be provided in a video conferencing system (column 11, lines 49-67; *see also* column 23, lines 35-45, figure 16). Also, the essence of Hylton lies in its teachings of how a wireless video distribution scheme that employs CDMA technology (*see* Abstract). The methodology, reasoning, and motivations for combining these references are elaborated in the rejection above.

As such, applicant's arguments are not persuasive

### ***Conclusion***

**7. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uchendu O. Anyaso whose telephone number is (703) 306-5934. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703) 305-9720.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Uchendu O. Anyaso

01/25/2004



CHANH NGUYEN  
PRIMARY EXAMINER